

12. A crystalline maltitol composition, comprising essentially maltitol crystals according to claim 11 and having a maltitol content greater than or equal to 87% and a maltotriitol content by weight of dry matter, lower than 1%.

13. <sup>The</sup> A crystalline maltitol composition according to claim 12 having a maltitol content greater than or equal to 92 %.

14. <sup>The</sup> A crystalline maltitol composition according to claim 12 having a maltitol content greater than or equal to 96 %.

15. A manufacturing process of a composition in accordance with claim 12, comprising the following steps :

- liquefaction of a starch slurry,
- saccharification of the slurry to obtain a maltose hydrolysate containing 87 % by weight of maltose,
- filtration and de-mineralisation of the maltose hydrolysate,
- hydrogenation of the maltose hydrolysate to obtain a maltitol syrup having a maltitol content greater than or equal to 87% and a maltotriitol content lower than 1% by weight of dry matter,
- crystallization of the syrup and separation of the formed maltitol crystals.

16. <sup>The</sup> A manufacturing process according to claim 15, wherein the maltitol syrup has a maltitol content greater than or equal to 92 %.

17. <sup>The</sup> A manufacturing process according to claim 15, wherein the maltitol syrup has a maltitol content greater than or equal to 96 %.

18. Modified maltitol crystals, being prismatic in form, ending in plane faces constituting a tetrahedron, and being 100 to 400  $\mu\text{m}$  long and about 20 to 100  $\mu\text{m}$  wide.

19. A crystalline maltitol composition, comprising essentially maltitol crystals according to claim 18 and having a maltitol content greater than or equal to 87% and a maltotriitol content greater than or equal to 4%.

20. <sup>The</sup> ~~A~~ crystalline maltitol composition according to claim 19 having a maltitol content greater than or equal to 92 %.

21. <sup>The</sup> ~~A~~ crystalline maltitol composition according to claim 19 having a maltitol content greater than or equal to 96 %.

22. A manufacturing process of a composition in accordance with claim 19, comprising the following steps :

- liquefaction of a starch slurry,
- saccharification of the slurry to obtain a maltose hydrolysate containing 87 % by weight of maltose,
- filtration and de-mineralisation of the maltose hydrolysate,
- hydrogenation of the maltose hydrolysate to obtain a maltitol syrup having a maltitol content greater than or equal to 87% and a maltotriitol content greater than or equal to 4% by weight of dry matter,
- crystallization of the syrup and separation of the formed maltitol crystals.

23. <sup>The</sup> ~~A~~ manufacturing process according to claim 22, wherein the maltitol syrup has a maltitol content greater than or equal to 92 %.

24. <sup>The</sup> ~~A~~ manufacturing process according to claim 22, wherein the maltitol syrup has a maltitol content greater than or equal to 96 %.

25. A crystalline maltitol composition, comprising maltitol crystals being bipyramidal in form comprising two regular tetrahedrons juxtaposed by their square section base with sides of 50 to 500  $\mu\text{m}$  approximately, thus constituting regular octahedrons with edge length of approximately 50 to

500  $\mu\text{m}$ , and comprising modified maltitol crystals being prismatic in form, ending in plane faces constituting a tetrahedron, and being 100 to 400  $\mu\text{m}$  long and about 20 to 100  $\mu\text{m}$  wide, and having a maltitol content greater than or equal to 87% and a maltotriitol content, by weight of dry matter, of between 1 and 4%.

B 26. <sup>The</sup> A crystalline maltitol composition according to claim 25 having a maltitol content greater than or equal to 92 %.

B 27. <sup>The</sup> A crystalline maltitol composition according to claim 25 having a maltitol content greater than or equal to 96 %.

28. A manufacturing process of a composition in accordance with claim 25, comprising the following steps :

- liquefaction of a starch slurry,
- saccharification of the slurry to obtain a maltose hydrolysate containing 87 % by weight of maltose,
- filtration and de-mineralisation of the maltose hydrolysate,
- hydrogenation of the maltose hydrolysate to obtain a maltitol syrup having a maltitol content greater than or equal to 87% and a maltotriitol content, by weight of dry matter, of between 1 and 4%,
- crystallization of the syrup and separation of the formed maltitol crystals.

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B 29. <sup>The</sup> A manufacturing process according to claim 28, wherein the maltitol syrup has a maltitol content greater than or equal to 92 %.

B 30. <sup>The</sup> A manufacturing process according to claim 28, wherein the maltitol syrup has a maltitol content greater than or equal to 96 %.

31. A process for determining bipyramidal or prismatic crystalline form or a mix of the two forms in a crystalline